

Message

From: Brown, Cheryl A. [/O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=DD6F8A562924439AAF97CA98DDAF1E10-BROWN, CHERYL]
Sent: 11/9/2016 9:12:04 PM
To: Labiosa, Rochelle [/o=ExchangeLabs/ou=Exchange Administrative Group (FYDIBOHF23SPDLT)/cn=Recipients/cn=ded3654216c9461d95cd5a3ceec507ef-Labiosa, Rochelle]; Cox, Michael [/o=ExchangeLabs/ou=Exchange Administrative Group (FYDIBOHF23SPDLT)/cn=Recipients/cn=cddd6a5bb3c2477183799ef56cdb464f-Cox, Michael]; Fullagar, Jill [/o=ExchangeLabs/ou=Exchange Administrative Group (FYDIBOHF23SPDLT)/cn=Recipients/cn=7ba061353c314b40a14a8be1ee382ae3-Gable, Jill]; Cope, Ben [/o=ExchangeLabs/ou=Exchange Administrative Group (FYDIBOHF23SPDLT)/cn=Recipients/cn=497efadd936e4d378225116b8f50fd3f-Cope, Ben]; Littleton, Christine [/o=ExchangeLabs/ou=Exchange Administrative Group (FYDIBOHF23SPDLT)/cn=Recipients/cn=2d5631654c3840f48f71c2457d8fb2ac-Reichgott, Teena]; Cora, Lori [/o=ExchangeLabs/ou=Exchange Administrative Group (FYDIBOHF23SPDLT)/cn=Recipients/cn=c8850941bf1540c796559dce75c2f5ee-Cora, Lori]
CC: Nelson, Walt [/o=ExchangeLabs/ou=Exchange Administrative Group (FYDIBOHF23SPDLT)/cn=Recipients/cn=023bd72e66a348018f63b4786c65c51b-Nelson, Walt]
Subject: RE: Comparison of Pteropod dataset off WA, OR, and CA

Yes, that is true these are just coastal waters off of WA. I'll take a look at PS.

Cheryl

From: Labiosa, Rochelle
Sent: Wednesday, November 09, 2016 12:35 PM
To: Brown, Cheryl A. <Brown.Cheryl@epa.gov>; Cox, Michael <Cox.Michael@epa.gov>; Fullagar, Jill <Fullagar.Jill@epa.gov>; Cope, Ben <Cope.Ben@epa.gov>; Littleton, Christine <Littleton.Christine@epa.gov>; Cora, Lori <Cora.Lori@epa.gov>
Cc: Nelson, Walt <Nelson.Walt@epa.gov>
Subject: RE: Comparison of Pteropod dataset off WA, OR, and CA

Hi Cheryl – just confirming that offshore WA is just for coastal WA. Do you have a sense for how the PS samples compare (from what you said before, by eyeball at least even more relative dissolution than OR)?

From: Brown, Cheryl A.
Sent: Wednesday, November 09, 2016 12:07 PM
To: Cox, Michael <Cox.Michael@epa.gov>; Fullagar, Jill <Fullagar.Jill@epa.gov>; Labiosa, Rochelle <labiosa.rochelle@epa.gov>; Cope, Ben <Cope.Ben@epa.gov>; Littleton, Christine <Littleton.Christine@epa.gov>; Cora, Lori <Cora.Lori@epa.gov>
Cc: Nelson, Walt <Nelson.Walt@epa.gov>
Subject: RE: Comparison of Pteropod dataset off WA, OR, and CA

Hi All,

Here is an updated powerpoint. The second slide includes the linear regressions between Percent of Water Column Undersaturated and Percent of Pteropods with Type II & III damage.

I plotted each state individually with separate series for 2011 and 2013. The regression lines pool the 2011 and 2013 data for each state. For each state, there are significant regressions between the two parameters. The slopes between the two parameters for each state are not significantly different; however, the intercepts are.

Hope this of use.

I'm not sure when I will be able to get to looking at the Puget Sound data.

Cheers on this somber day,
Cheryl

From: Cox, Michael
Sent: Tuesday, November 08, 2016 3:04 PM
To: Brown, Cheryl A. <Brown.Cheryl@epa.gov>; Fullagar, Jill <Fullagar.Jill@epa.gov>; Labiosa, Rochelle <labiosa.rochelle@epa.gov>; Cope, Ben <Cope.Ben@epa.gov>; Littleton, Christine <Littleton.Christine@epa.gov>; Cora, Lori <Cora.Lori@epa.gov>
Cc: Cox, Michael <Cox.Michael@epa.gov>; Nelson, Walt <Nelson.Walt@epa.gov>
Subject: RE: Comparison of Pteropod dataset off WA, OR, and CA

Nice. I assume the samples were collected at similar times so the differences cannot be explained by season.

I think fit curves would be helpful if you have the time.

More work for you, but I would be interested in the results from Puget Sound that were provided.

Finally, were you going to share the discrepancies with Dick in relation to the CA/WA data?

Thanks again for all your work on this Cheryl. It really has helped to understand the relationships better and to communicate the results.

Also, sorry about not getting to the RARE work yesterday. My bad in time management.

Michael Cox
Office of Environmental Assessment
US EPA Region 10, 1200 Sixth Avenue, Suite 900
Seattle, WA 98101
206-553-1597
cox.michael@epa.gov

From: Brown, Cheryl A.
Sent: Tuesday, November 08, 2016 12:12 PM
To: Cox, Michael <Cox.Michael@epa.gov>; Fullagar, Jill <Fullagar.Jill@epa.gov>; Labiosa, Rochelle <labiosa.rochelle@epa.gov>; Cope, Ben <Cope.Ben@epa.gov>; Littleton, Christine <Littleton.Christine@epa.gov>; Cora, Lori <Cora.Lori@epa.gov>
Subject: Comparison of Pteropod dataset off WA, OR, and CA

Hi All,

I looked in more detail at the 2013 stations off the coast of WA & CA (these were not included in the analysis I provided since we were focusing on OR).

Three of 2013 stations off of CA and WA also had locational discrepancies (stations 26, 35 and 105).

Assuming that the pteropod locational data are correct, I matched up the CTD station for these stations.

Here is a slide which compares the relationship between pteropod damage and depth (top row) and percent of water column undersaturated and depth (bottom row), with the dataset divided by those off the coast of WA, OR, and CA.

From this you can see, there were similar patterns observed in OR and WA; however, OR had higher levels of pteropod damage than observed offshore of WA; while CA had fairly low levels and pteropod damage doesn't asymptote at the same value as in WA and OR (30-40%) .

OR and WA had fairly similar patterns in % of water column undersaturated with depth; however, CA had fewer stations with undersaturated water column.

I can fit curves to these data if needed, but just wanted to see if waters offshore of different west coast states had similar patterns.

Hope this is of use.

Cheryl